

ABSTRACT

A guide device includes a ram and a column translatable axially relative to each other. The ram has an outer circumferential surface of a squared cross section formed of four flat portions each of which extends axially. The column disposed around the ram has a through hole of a squared cross section formed of four flat portions corresponding to the flat portions of the ram. In each flat portion of the column is provided a needle bearing that rolls on the corresponding flat portion of the ram. Inside the column are provided a plurality of supporting shafts extending in a direction perpendicular to the extending direction or to the axial direction of each flat portion of the ram. Each needle bearing is rotatably supported by the corresponding supporting shaft.

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